

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: \_\_\_\_\_ Examiner #: \_\_\_\_\_ Date: \_\_\_\_\_  
 Art Unit: \_\_\_\_\_ Phone Number 30 \_\_\_\_\_ Serial Number: \_\_\_\_\_  
 Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

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**STAFF USE ONLY**

	Type of Search	Vendors and cost where applicable
Searcher: <u>D. Schueber</u>	NA Sequence (#) <u>1</u>	STN _____
Searcher Phone #: <u>272-2826</u>	AA Sequence (#) <u>16</u>	Dialog _____
Searcher Location: <u>Kensington Hall</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>7/21</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>19</u>	Fulltext _____	Sequence Systems <u>Compucon</u>
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>122</u>	Other _____	Other (specify) _____

Document Type: C

LINEAR FREE-SULFHYDRYL-CONTAINING OLIGOPEPTIDE DERIVATIVES AS  
ANTIHYPERTENSIVE AGENTS; HYPOTENSIVE AGENTS

Inventors: Bovy Philippe R (US); Manning Robert E (US); O'Neal Joan M (US)

Assignee: Searle, G D & Co

Assignee Code: 75400

Publication (No,Date), Applic (No,Date):

US 5106834 19920421 US 88290667 19881227

Publication Kind: A

Calculated Expiration: 20090421

(Cited in 003 later patents) Document Type: EXPIRED

Priority Applic(No,Date): US 88290667 19881227

Abstract: Synthesis and use of novel oligopeptides are described, many of which peptides contain one or several unnatural amino acids. These short linear peptide derivatives are characterized by the presence of a free sulfhydryl function. These compounds have a high affinity for the Atrial Natriuretic Peptide (ANP) receptor coupled to particulate guanylate cyclase. Such peptides are full agonists at the ANP receptor as demonstrated by the ability of the peptides to stimulate the production of cGMP and to relax smooth muscles in vitro. In accord with these observations, the compounds of the invention lower blood pressure in mammals. Preferred peptides are the following:

Cys-Cha-Gly-Gly-Arg-Ile-Asp-Arg-Ile-GlyNH<sub>2</sub>;

D-Cys-Cha-Gly-GlyArg-Ile-Asp-Arg-Ile-GlyNH<sub>2</sub>;

L-Pen-Cha-Gly-Gly-Arg-Ile-Asp-ArgIle-GlyNH<sub>2</sub>; and

Cys-Cha-Gly-Gly-Arg-Ile-Asp-Arg-IleNH<sub>2</sub>.

Publication (No,Date), Applic (No,Date):

...19920421

Exemplary Claim: ...alkyl radical of three to about fifteen carbon atoms;

wherein X<sub>2</sub> is selected from the **dipeptide** fragments Gly-Gly,

Gly-Ala, Gly-D-Ala, Ala-Gly and DAla-Gly; wherein CORE...

Non-exemplary Claims: ...Cys-Cha-Gly-Gly-Arg-Ile-Glu-Arg-Ile-GlyNH<sub>2</sub>;

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? s adjuvant??
  S1 161386 ADJUVANT??
? s saponin
  S2 10048 SAPONIN
? s GM(w)csf
    77310 GM
    126909 CSF
  S3 34634 GM(W)CSF
? s interleukin
  S4 419650 INTERLEUKIN
? s stimulat?(5n)immune
    1673084 STIMULAT?
    1183594 IMMUNE
  S5 16423 STIMULAT?(5N)IMMUNE
? s s1 and s2
    161386 S1
    10048 S2
  S6 799 S1 AND S2
? s s6 and s3
    799 S6
    34634 S3
  S7 16 S6 AND S3
? s s7 and s4
    16 S7
    419650 S4
  S8 14 S7 AND S4
? s s8 and py<1996
Processing
    14 S8
    27474501 PY<1996
  S9 0 S8 AND PY<1996
? s s7 and py<1996
Processing
    16 S7
    27474501 PY<1996
  S10 0 S7 AND PY<1996
? s s1 and s3
    161386 S1
    34634 S3
  S11 1255 S1 AND S3
? s s11 and s4
    1255 S11
    419650 S4
  S12 443 S11 AND S4
? s s12 and s2
    443 S12
    10048 S2
  S13 14 S12 AND S2
? s s13 and py<1996
Processing
    14 S13
    27474501 PY<1996
  S14 0 S13 AND PY<1996
? s s12 and py<1996
    443 S12
    27474501 PY<1996
  S15 55 S12 AND PY<1996
? s s15 and s5
    55 S15
    16423 S5
  S16 2 S15 AND S5
? rd

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>>>Duplicate detection is not supported for File 340.

? ds

Set	Items	Description
S1	575	MET(W)GLY
S2	29559	DIPEPTIDE??
S3	36	S1 AND S2
S4	750	MET(W)GLN OR MET(W)GLU
S5	20	S4 AND S2
S6	9	S5 AND PY<=1996
S7	9	RD (unique items)

? s tripeptide??

S8	13584	TRIPLEPTIDE??
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? s s8 and s4

13584	S8
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750	S4
-----	----

S9	13	S8 AND S4
----	----	-----------

? s s9 and py<1996

Processing

13	S9
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27474501	PY<1996
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S10	4	S9 AND PY<1996
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? t s10/3,k,ab/1-4

10/3,K,AB/1 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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## SCORE OVER LENGTH SEARCHES

Attached is a score over length search. This search was developed to overcome limitations in most standard search systems which favor large sequences with high scoring, but lesser overall identity over smaller sequences with higher overall identity. This search is especially useful for relatively small nucleic acid or polypeptide target sequences (antisense, fragments, probes, primers, RNAi, epitopes, haptens, etc.) claimed functionally via a form of hybridization and/or identity language and having defined upper and lower polynucleotide and or polypeptide length limits.

The score over length search is performed by first running the query sequence using examiner-specified identity and polynucleotide or protein length limit parameters, and saving 65,000 hits and 0 alignments from each desired database. The resulting output is reformatted using a Microsoft Word macro and is imported into Excel. The summary table data are then sorted by the ratio of score of each hit sequence divided by its length and the accession numbers for all hits below the examiner's desired score over length parameters are deleted. The remaining accession numbers are used to pull the corresponding sequences from the databases into subdatabases enriched for good hits and the query sequence is re-run against these subdatabases to yield the final results.

The score over length cutoff for this search is 100%.

Examiner Please Note: This cover sheet should be included when submitting results to be scanned.